

HEALTH RISK BEHAVIORS – LIFESTYLE CHOICES

Health Risk Behaviors – Lifestyle Choices

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HIGHLIGHTS FROM HEALTH RISK BEHAVIORS

The following information highlights the findings from the Orange County Health Needs Assessment (OCHNA) as they pertain to health risk behaviors.

- ❖ The American Dietetic Association states that a healthy diet contains plenty of whole grains, fruits, vegetables, and other nutrient-rich foods. Additionally, physical activity contributes to a longer and healthier life. According to the OCHNA survey results, 90% of children are not meeting the guideline for daily consumption of fruits and vegetables.
- ❖ More than 18% of OCHNA survey respondents said they exercised 5 or more days per week. In addition, as income levels increase so does the likelihood of having taken part in physical activities in the past month. However, when asked how many times per month they exercised, an inverse relationship is found. Individuals in the low income (under \$20,000) category were more likely to have exercised 5 or more days per week.
- ❖ Since the 1970s the number of overweight adults has increased across all race and sex groups. Results from the 1988-1994 National Health and Nutrition Examination Survey (NHANES) indicate that 14% of children aged 6 to 11 and 12% of adolescents aged 12 to 17 are overweight. Conversely, less than 4% of the population in Orange County is underweight. Of those who are underweight, only 24% actually consider themselves underweight. Respondents in the overweight category are the most likely not to exercise at all, while obese respondents were most likely to partake in heavy exercise. In general, moderate exercise and a healthy diet are the best means to maintaining a healthy body weight.
- ❖ When adult respondents were asked where the health education of their children should take place, 78.7% said in the home and 61.9% said in school. Thus, an increased effort is needed to educate parents and teachers on health related topics. OCHNA respondents indicated only 46.9% of their physicians had discussed exercise with them and fewer (43.7%) reported that a physician had spoken to them about nutrition or diet.
- ❖ According to the Department of Health and Human Services, alcohol is implicated in 39% of all fatal traffic crashes and nearly half of all intentional injuries, including homicides and suicides. Alcohol use within the past month was reported by nearly 62% of OCHNA survey respondents, and those in the high income category (more than \$50,000) were more likely to have consumed alcohol in the past month than those in the low income category (less than \$20,000). Respondents who reported driving after having “too much to drink” comprised 3.6% (71,649).
- ❖ Smoking by adults in Orange County in 1998 accounted for 17.7% or 360,002 residents, which is 2.7% higher than the Healthy People 2000 objective. According to respondents of the OCHNA survey, 83.1% of smokers reported smoking their first cigarette while still in their teens (less than 19 years old). In addition, 30.7% had their first cigarette before their 14th birthday, and only 2.9% smoked their first cigarette after age 19. Since 1990, Orange County has consistently shown a lower rate of adult smoking than the state, as well as a decline in the daily consumption of cigarettes. In 1998, 69.3% of Orange County smokers had attempted to quit, and more than 73.6% stated they would like to quit.
- ❖ According to the OCHNA survey, 61.9% of adults reported health education should be provided in schools; 57% reported sex education should be provided in schools, with 86.2% stating sex education should also be provided at home. In addition, 87.1% of respondents with children stated if they had a sexually active teen they would encourage him or her to use condoms. Of the adults surveyed 18.6% stated they or their partner used condoms for protection against sexually transmitted diseases (STD). Of those, 55.5%, “always” used a condom but 44.5% were inconsistent, thus increasing their risk for contracting STD.

- ❖ Approximately 20 percent of Americans will develop some form of skin cancer during their life. OCHNA survey results indicate that 15.1% of respondents always wear protective clothing when going out in the sun, while 32.7% stated they never do. People in the high income category (more than \$50,000) were less likely *never* to wear protective clothing and more likely to *sometimes* wear protective clothing than those in other income categories. However, they were also less likely to *always* wear protective clothing.

Focus Group Comments

Focus group participants had some interesting input on topics central to health risk behaviors. Below are some quotes.

Participants in the senior focus group talked about the importance of a healthy diet and some of the difficulties in following one.

[I] abstain from eating fat, because [I] am afraid of heart blocking...(2:11)

There is nothing available that's healthy for people who can't or won't cook. And I think a lot of men who live alone probably are even worse than women who live alone. They buy these prepared meals.(3:44)

...They can't eat healthy. It's too expensive. The difference between a loaf of bread that's white and loaf of bread that's wheat, it 2 times as expensive. Fresh fruit is very expensive. Fresh vegetables are very expensive.(3:14)

Providers of services to children voiced the following concerns about overweight children and the lack of exercise.

...Now because we don't have very much money, the kids don't have to go out and do anything physical. And if they do, they have to pay a fortune to be able to do it, just to belong to a team, even if it's representing their high school.(1:10)

...The kids sit at home.... Watch TV... Have their metabolic rate drop down lower, and, as a result they munch at the same time, and so then they come to my office off the curve, greater than 95th percentile, not for height.(1:10)

Children and teens in the focus group spoke openly and honestly about drugs, the presence of drugs on school campuses, and the struggles they face when their friends are doing drugs.

...I have to say about two thirds of kids that pass by me are smoking a cigarette or smoking weed, or something. And...I mean like if I just go around campus sometimes you might pass by a group and they're all like this over a table and you look in and you can see they've got it on the table.(2:31)

...Like you know about drugs and everything, but still you want to be like your friends....If your friends are doing it, you want to try it and see how good it is. And they're talking about how good it is and all this stuff, but then everybody else is...and all your parents are there telling you how bad it is, because they've already gone through it. They've tried it already. They had their time, but they don't want you to do it, too. (2:36)

Yea. I've seen drugs in action. My best [friend] from fifth grade...fifth grade. This is what 11 years old? She...she started smoking weed. Started smoking crack. She got pregnant. She had a miscarriage. She got pregnant again. She had an abortion. She got pregnant again and had a baby. It's basically...what she knows, she just like proved the statistics that drugs can lead to so many things that can go wrong in your life. (2:33-34)

Other children commented that the educational focus on drugs might not adequately emphasize the problems associated with alcohol and tobacco use.

Alcohol and like smoking are the two main things that they skipped over, and everybody thinks like, oh, those are just major drugs. I won't do those. I'll just do like...I'll smoke cigarettes and drink all the time, and it's better doing that. (2:37-38)

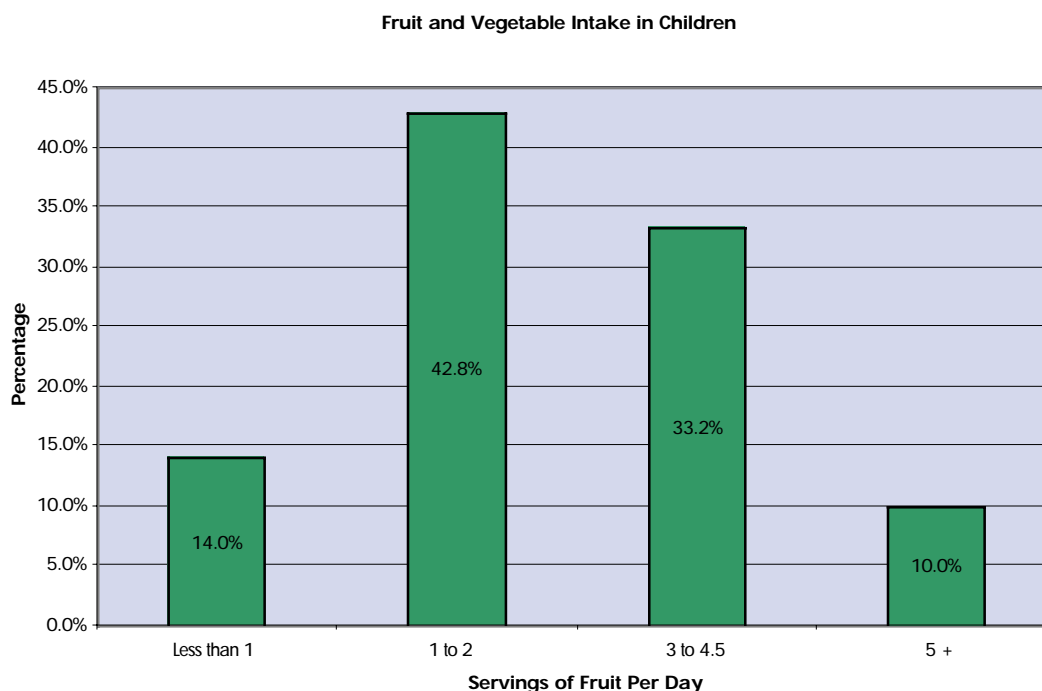
NUTRITION AND DIET SUMMARY

- ❖ Nearly one third of cancer deaths in the U.S. can be attributed to dietary factors.
- ❖ The American Dietetic Association recommends that people eat 5 or more servings of fruit and vegetables each day. OCHNA survey results showed only 10% of children are meeting this guideline.
- ❖ More than 78% of survey respondents indicated parents should be responsible for teaching health education to children; 61.9% indicated health education should take place at school, 18.7% indicated hospitals, 13.4% indicated churches, and 2.4% indicated it should take place elsewhere.
- ❖ Physical activity contributes to a longer and healthier life. Nearly 83% of OCHNA survey respondents reported having participated in physical activities in the last month; 36.5% take part in moderate to heavy exercise.
- ❖ After calculating Body Mass Index (BMI), 48% of OCHNA survey respondents were considered normal body weight; 34% (884,451 residents) were considered overweight; and 14% (364,186 residents) were considered obese.
- ❖ BMI was calculated with respect to perception of body weight. Survey respondents did quite an accurate job of correctly assessing body weight. Participants who were underweight were less likely to have an accurate perception of their body weight.
- ❖ Unhealthy body weight is associated with increased probability for cancer, high blood pressure, high blood cholesterol, and heart disease. OCHNA survey results seemed to support these findings.

NUTRITION AND DIET

Eating a balanced diet and taking part in moderate exercise on a regular basis are essential to maintaining a healthy lifestyle. The American Dietetic Association (ADA) states that a healthy diet consists of plenty of whole grains, fruits, vegetables, and other nutrient-rich foods. In addition, eating regular meals of moderate portions along with regular physical activity can help in maintaining a healthy body weight. According to the American Heart Association (AHA), scientific evidence suggests that healthy eating and physical activity decrease risk of heart disease and diabetes, lower blood cholesterol, and reduce the risk of many types of cancer. In fact, according to the American Cancer Society (ACS) evidence suggests that nearly one third of cancer deaths in the United States can be attributed to dietary factors.

The ADA, along with *Healthy People 2000*, recommends that people eat 5 or more servings of fruits and vegetables each day. According to the ACS, consumption of fruits and vegetables helps decrease the risk of cancers of the gastrointestinal and respiratory tracts. One goal of *Healthy People 2000* was to have 50% of people meeting these dietary guidelines of eating 5 fruits or vegetables each day. OCHNA survey results indicated only 10% of children are meeting this guideline.



Additionally, OCHNA survey results indicated that more than 80% of children are eating at fast food restaurants at least once a week. Although many fast food chains have added healthier food choices to their menus, typically fast food restaurant menu choices are high in fat, calories, and sodium. Therefore, patronizing fast food restaurants may be contributing to the overweight prevalence among adults and children. Eating at fast food restaurants occasionally may not pose a problem as long as the majority of food choices each week are balanced and low in fat, calories, and sodium.

The ADA recommendations for healthy living:

- ❖ Eating a variety of nutrient-rich foods such as plenty of whole grains, fruits, and vegetables
- ❖ Consuming proportioned meals
- ❖ Maintaining a healthy weight.
- ❖ Eating regular meals.
- ❖ Reducing intake of certain foods such as, fat, salt, and sugar
- ❖ Balancing food choices over time

According to the AHA, physical activity contributes to a longer and healthier life. Exercise has been demonstrated to have protective effects for several chronic diseases including coronary heart disease, hypertension, osteoporosis, colon cancer, non-insulin-dependent diabetes mellitus, depression and anxiety, and back injury. In addition, regular physical activity helps maintain functional independence of older adults and can enhance the quality of life for people of all ages. The OCHNA survey of Orange County residents found the following:

- ❖ Nearly 83% of respondents have participated in physical activities in the past month.
- ❖ Nearly 36.5% of respondents take part in moderate to heavy exercise.

The *Healthy People 2000* objective for physical activity was to decrease the number of individuals not taking part in any physical activity to 15%; OCHNA survey responses in this category totaled 17.2%. Although the Orange County rate did not meet the *Health People 2000* goal, it was lower than the percentage for California (23.6%).

Healthy People 2000 has set a target for 30% of the population to take part in exercise 5 or more days each week; 18.6% of OCHNA respondents indicated they follow this target guideline. The large disparity between the 2 rates, combined with the finding that 48% of the population is overweight or obese, and the impact these factors have on long-term health should be of great concern for the future of overall healthy Americans.

Of the OCHNA survey respondents with children, 82% indicated their child or children were at a healthy body weight. Nearly 10% believed their child was underweight and nearly 10% believed their child was overweight. Parents with incomes under \$20,000 annually were significantly less likely to consider their child to be about the right weight than parents making more than \$50,000 annually.

Perceived body weight of child	Responses (%)
Underweight	8.7
Right weight	81.5
Overweight	9.8

Between 1980 and 1994, the proportion of overweight children and adolescents has increased by 6% as reported by the National Health and Nutrition Examination Survey (NHANES). The 1988 to 1994 NHANES survey indicated 14% of children aged 6 to 11 and 12% of adolescents ages 12 to 17 are overweight. A conservative definition of overweight is used for minors to account for growth spurts and other changes that take place during youth and adolescence. Minors are considered overweight if their Body Mass Index (BMI) exceeds the 95th percentile for children and adolescents of the same age and sex group as measured in the 1960s.

Healthy People 2000 goal is for at least 75% of children aged 6 to 17 participate in vigorous physical activity for at least 20 minutes 3 days a week. OCHNA survey responses indicated nearly 90% of children in Orange County get at least 30 minutes of exercise at least 3 days a week.

Days each week child gets 30 minutes or more exercise	Responses (%)	Representative Orange County Population
0	5.5	42,962
1	1.2	9,148
2	3.6	28,281
3	6.0	47,631
4	5.1	40,447
5	18.6	146,871
6	4.2	32,803
7	55.8	439,421

The guideline used by *Healthy People 2000* (20 minutes of activity per week) does not match precisely the question posed by the OCHNA survey (30 minutes of activity per week), and it is not clear whether children in Orange County are getting sufficient physical activity each week; especially since 9.8% of the parents considered their children overweight.

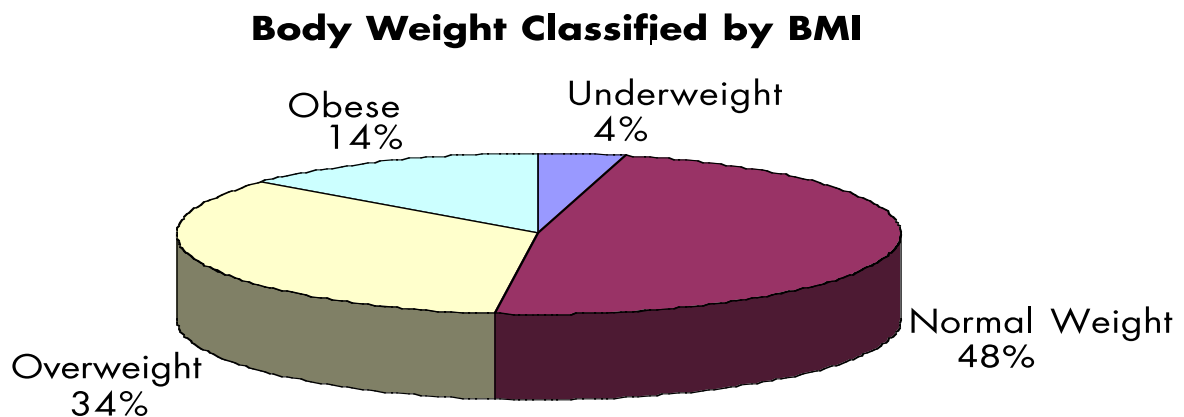
Currently the generally accepted measure for determining a healthy body weight is Body Mass Index (BMI). This scale is calculated by dividing a person's weight (in pounds) by his or her height (in inches squared) and multiplying the product by 704.5.

- ❖ A BMI of 18.5 or lower is considered underweight.
- ❖ Scores between 18.5 and 25 are considered normal.
- ❖ A BMI between 25 and 30 is considered overweight.
- ❖ Scores above 30 are labeled obese.

BMI does have some practical limitations. First, it cannot be applied to children under age 18 who are still in the stages of growth. In addition, it does not account for differences in build or muscle mass. For example, it would not be a valid measure for individuals with more muscle and a lower percentage of body fat.

UCHNA survey respondents were asked their height and weight and BMI was computed for each individual. Findings indicated the following:

- ❖ Less than half (48%) of participants were considered to be normal body weight; nearly 4% were considered underweight.
- ❖ 34% of the population was considered overweight; 14% was considered obese.



Body Weight Classified by BMI	Respondents (%)	Corresponding Populations
Normal	48	1,248,636
Overweight	34	884,451
Obese	14	364,186
Underweight	4	104,053

The 1988-1994 NHANES analysis showed nationally approximately 35% of adults over age 20 were overweight. Between 1980 and 1994 there was an overall increase of 9% for overweight adults as reported by NHANES.

Healthy People 2000 has set a goal to decrease the number of overweight individuals over age 20 to 20% of the population. OCHNA survey respondents did not meet this goal, but the OCHNA survey sample included all adults over age 18. Therefore, the OCHNA survey does not compare precisely with the *Healthy People 2000* data that excluded 18 and 19 year-olds.

Along with being questioned about height and weight, OCHNA participants were asked about their perception of their body weight. BMI was calculated for each respondent based on actual body weight classification and compared to their perception of their weight.

- ❖ Participants were quite accurate in correctly assessing their body weight.
- ❖ Participants who were underweight were less likely to have an accurate perception of their body weight.

When BMI was examined in relation to exercise, results indicated people in the overweight category were more likely “not to exercise at all,” while obese respondents were more likely to partake in heavy exercise. One inference that could be made is that obese individuals exercise heavily more often because they are attempting to lose weight and improve their health. There were too few underweight respondents to calculate reliable statistics on the amount of exercise in which they are involved.

BMI Standards	Exercise Categories				
	None (%)	Light (%)	Mild (%)	Moderate (%)	Heavy (%)
Underweight	NA	NA	NA	NA	NA
Normal Weight	23.8	26.7	15.0	19.3	15.1
Overweight	29.9	22.1	13.8	20.0	15.0
Obese	21.8	21.0	14.1	17.9	25.2
Total	25.3	24.0	14.3	19.6	16.8

OCHNA survey results indicated that less than 4% of respondents were underweight. Although this percentage seems low, the underweight group must be addressed. In this category, only 24% considered themselves underweight. More than 50% believed themselves to be at normal weight, and 20% considered themselves overweight. These perceptions may cause reason for concern in light of the requirements necessary to fall in the underweight category based on BMI. For example, an individual who is 6 feet tall would have to weigh 136 pounds or less before being classified underweight.

Because OCHNA survey results indicated nearly half (47.6%) of respondents were overweight or obese, there is a high medical concern. Unhealthy body weight is associated with increased probability for cancer,

high blood pressure, high blood cholesterol, and heart disease. Participant responses seemed to support these findings.

High Blood Pressure

- ❖ A small increase in the incidence of high blood pressure occurred between normal weight and overweight individuals.
- ❖ Obese individuals were more than twice as likely to respond as having high blood pressure than individuals within the normal weight category.

High Blood Cholesterol

- ❖ A noticeable increase in incidence of high blood cholesterol occurred between normal and overweight individuals.
- ❖ The increased incidence of high blood cholesterol was greater for obese individuals.

Heart Disease

- ❖ An increased incidence of heart disease was not noted in overweight individuals, but became apparent in obese respondents.

Cancer

- ❖ A modest increase in the incidence of cancer was noted in overweight individuals in comparison to normal-weight respondents.
- ❖ There were not enough responses from obese individuals to draw any conclusions.

Arthritis

- ❖ There was a substantial increase in the prevalence of arthritis among obese individuals.

Incidence of Chronic Diseases						
BMI Standards	High blood pressure (%)	High blood cholesterol (%)	Heart disease (%)	Cancer (%)	Arthritis (%)	Injury from accidents (%)
Underweight	NA	NA	NA	NA	NA	NA
Normal weight	14.0	10.2	5.6	4.8	12.0	8.6
Overweight	17.5	19.9	5.0	5.8	13.8	11.2
Obese	30.5	21.4	9.4	NA	23.3	12.4

Moderate exercise and a healthy diet are the best approaches in maintaining a healthy body weight. Individuals struggling with weight control or obesity should consult their family doctor and inquire about the possibility of speaking with a dietician or nutritional counselor.

Healthy People 2000 has a target of 75% of primary care providers providing nutritional assessment and counseling and/or referral to nutritionists or dietitians, and 50% of all primary care providers routinely assessing and counseling their patients on frequency, duration, and intensity of each patient's physical activity practices. Nearly 47% of OCHNA survey respondents indicated their physician had discussed exercise, and 43.7% reported their physician had spoken to them about nutrition or diet. These percentages do not meet the *Healthy People 2000* goals.

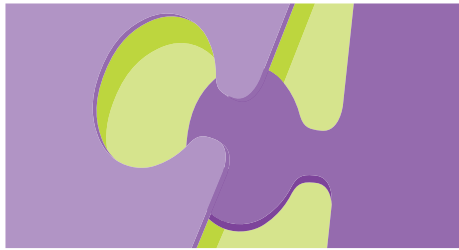
When survey participants were asked who should be responsible for teaching children health education, the responses were as follows:

- ❖ Home/parents, 78.7%
- ❖ Schools, 61.9%
- ❖ Hospitals, 18.7%
- ❖ Churches, 13.4 %
- ❖ Other, 2.4 %

The implications of these findings are that increased efforts are needed to educate parents and teachers on health-related topics including nutrition.

A high percentage (97.7%) of county adults surveyed reported they did not participate in a health improvement program through their employers, health plans (97.5%), community organizations (98%), hospitals (98.7%), college/university (99.1%), or church (99.2%) in the last year. Additionally, 90.8% of participants surveyed reported not participating in any health improvement program of any kind.

The *Healthy People 2000* goal is to increase to at least 50% the proportion of work sites with 50 or more employees that offer nutrition education and/or weight management programs for employees.



Community Health: Working the Puzzle

ALCOHOL AND DRUG USE SUMMARY

- ❖ Alcohol abuse is associated with trauma, crime, and poor health.
- ❖ The nearly 105,000 alcohol-related deaths that occur each year in the U.S. are preventable.
- ❖ Nationally, alcohol is implicated in 39% of all fatal traffic crashes and nearly half of all intentional injuries including homicides and suicides.
- ❖ Almost 50% of all rapes and sexual assaults involve alcohol use by the offender, and nearly half of all domestic violence cases involve alcohol.
- ❖ 36% of convicted violent offenders reported drinking at the time of the offense.
- ❖ The misuse of alcohol is also associated with several health risks including heart disease and stroke, and is the primary contributor to cirrhosis of the liver.
- ❖ It is estimated that alcohol use and abuse costs the United States approximately \$148 billion annually, including direct health care costs due to alcohol-related illnesses, injuries and deaths, and crime and incarceration.
- ❖ More than 60% of OCHNA survey respondents reported they currently consume alcohol.
- ❖ Binge drinking involves the consumption of 5 or more alcoholic beverages on any one occasion. Nearly 17.2% of OCHNA survey respondents reported binge drinking in the past month; this percentage translates to approximately 340,000 adults.
- ❖ Alcohol is the single greatest causal factor in motor vehicle deaths and injuries. Among OCHNA survey respondents, 3.6% (71,649 people) admitted to having driven after having too much to drink during the past month, this is equal to 71,649 of Orange County adults.
- ❖ Marijuana is the most commonly used illicit drug. Among OCHNA survey respondents, 4% indicated recreational drug use and 9% indicated their doctor had discussed drug use with them during a visit.

ALCOHOL AND DRUG USE

According to the Department of Health and Human Services, alcohol abuse is associated with a variety of social problems including trauma, crime, and poor health. The United States Department of Health and Human Services (1990) reported that the nearly 105,000 alcohol-related deaths that occur each year in the United States are preventable.

- ❖ Alcohol is implicated in 39% of all fatal traffic crashes and nearly half of all intentional injuries including homicides and suicides.
- ❖ Almost 50% of all rapes and sexual assaults involve alcohol use by the offender, and nearly half of all domestic violence cases involve alcohol.
- ❖ 36% percent of convicted violent offenders reported drinking at the time of the offense.

Misuse of alcohol is also associated with several health risks including heart disease and stroke, and is the primary contributor to cirrhosis of the liver.

The alcohol-related behaviors that place a person at-risk include binge drinking, chronic drinking, and drinking and driving. It is estimated that alcohol use and abuse costs the United States approximately \$148 billion yearly, including direct health care costs due to alcohol-related illnesses, injuries and deaths, and crime and incarceration.

Current drinkers are people who have consumed 1 or more alcoholic drinks within the past month. More than 60% of the OCHNA survey respondents reported they currently consume alcohol. Orange County drinking rates are slightly higher than rates for both California and the nation. National drinking rates among adults have stayed relatively constant over the past few years.

Orange County (%)	California (%)	United States (%)
61.8	59.1	57.1

Centers for Disease Control and Prevention On-line Prevalence Data, California 1996. SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1997.

Binge drinking involves the consumption of 5 or more alcoholic beverages on any one occasion. Frequent binge drinkers are more likely than non-binge drinkers to become hurt or injured. Additionally, binge drinkers are 2.7 times more likely than non-binge drinkers to endure unwanted sexual intercourse. Kantor and Straus (1987) found that husbands who binge-drink are 3 times more likely to abuse their wives than husbands who abstain from drinking. Nearly 17.2% of OCHNA survey respondents reported binge drinking in the past month; this percentage translates to approximately 340,000 adults. This percentage falls between the California and national binge drinking numbers.

Orange County (%)	California (%)	United States (%)
17.2	14.6	20.9

Centers for Disease Control and Prevention On-line Prevalence Data, California 1996. SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1997.

Heavy alcohol use is defined as drinking 5 or more drinks on the same occasion on each of 5 or more days in the past month. All heavy alcohol users are also binge drinkers.

Beer accounts for more than half of the annual consumption of all alcoholic beverages in the United States, and for three quarters of all alcohol consumed in excess of moderation. Alcohol consumed in the United States is broken down as follows:

- ❖ Beer, 55%
- ❖ Wine, 13%
- ❖ Liquor, 32%

(Williams GS, Stinson RS, Clem D, and Noble J. 1992, Apparent per capita alcohol consumption: national, state and regional trends: 1977-1990. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism, Alcohol Epidemiologic Data System).

Alcohol is the single greatest factor causing motor vehicle deaths and injuries nationwide. In 1996, 41% of all motor vehicle-related fatalities in the United States involved alcohol; alcohol-related crashes accounted for more 17,000 deaths and more than 1 million injuries. According to the National Highway Traffic Administration, 3 in every 10 Americans will be involved in an alcohol-related crash in their lifetime. In 1995, approximately 1.4 million drivers were arrested for driving under the influence of alcohol or narcotics; this is an arrest rate of 1 in 123 licensed drivers in the United States.

In Orange County, nearly 3.6% of OCHNA survey respondents admitted to having driven after having too much to drink during the past month. This percentage rate or actual percentage is higher than the California percentage, but equal to the national percentage.

Orange County (%)	California (%)	United States (%)
3.6	2.5	3.6

Centers for Disease Control and Prevention On-line Prevalence Data, California 1996. PRC National Health Survey 1995.

The Orange County rate of 3.6% represents approximately 72,000 adults each month who acknowledge having driven after drinking too much.

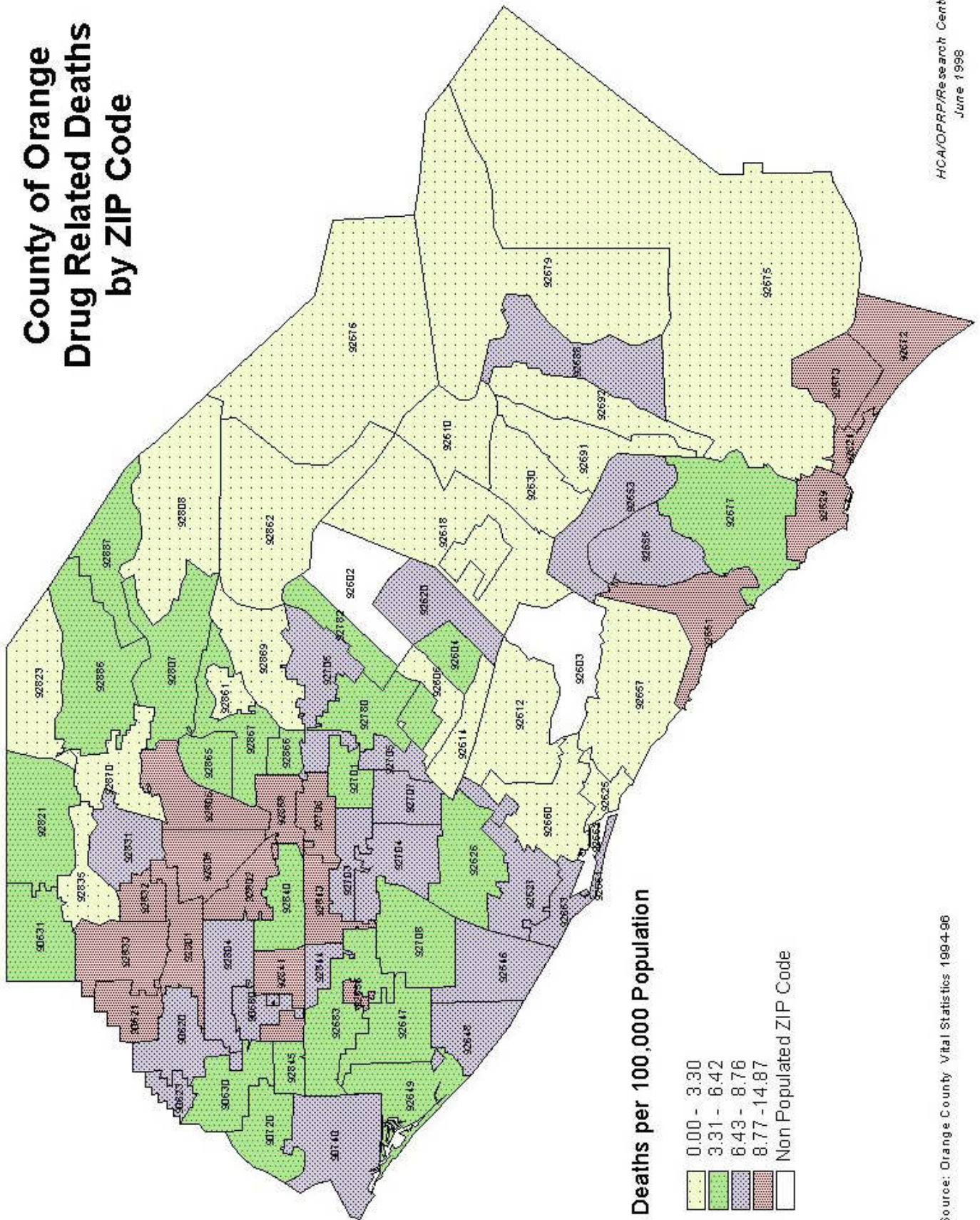
In addition to alcohol, the use of recreational drugs also poses a public health risk both locally and across the country. According to the National Household Survey on Drug Abuse (August 1998), approximately 40% of illicit drug users in 1997 were users of illicit drugs other than marijuana and hashish. Marijuana was the most commonly used illicit drug.

In 1998, Orange County Health Care Agency (HCA) reported 53% of admissions for alcohol and drug treatment programs were drug related. Additionally, 24% were admitted for methamphetamine use and 11% for heroin. According to the OCHNA survey, 4% of respondents indicated recreational drug use, and 9% indicated their doctor had discussed drug use with them during a visit.

The OCHNA survey did not ascertain the type of drugs respondents were using (e.g. marijuana versus methamphetamines or heroin) or the frequency with which they were used. While the data is limited and can not give us a complete picture as to the full extent of the problem in Orange County it is noteworthy that only 4% of respondents admitted drug use, but more than twice as many admitted that their health care provider had discussed this health issue with them.

Further study and more data is needed in order to understand the full extent and impact of recreational drug use on the health of our community.

County of Orange Drug Related Deaths by ZIP Code



HCA/OPRP/Research Center
June 1998

Source: Orange County Vital Statistics 1994-96

TOBACCO SUMMARY

- ❖ Smoking is the number 1 preventable cause of premature disease and death in the United States, killing more than 430,000 Americans annually – more than deaths due to alcohol, illegal drugs, homicide, suicide, car accidents, fire, and AIDS combined.
- ❖ Smoking causes 30% of heart disease and cancer deaths, and 80% of emphysema deaths.
- ❖ Several studies have shown nicotine is as addictive as heroin, cocaine, or alcohol.
- ❖ More than 17% (360,002) of adults in Orange County smoke.
- ❖ In Orange County, the daily consumption of cigarettes has declined since 1990. The percentage for smokers with a daily cigarette consumption of 0 to 4 has increased from 21.9% in 1990 to 27.4% in 1998. The percentage for smokers with daily cigarette consumption of more than 25 decreased from 19.2% in 1990 to 11.1% in 1998.
- ❖ Nationally each day 3,000 children start smoking; they begin at an average age of 12 .
- ❖ Since 1993, all measures of teen smoking behavior indicate that more adolescents are smoking and more will smoke in the future.
- ❖ In 1998, just over 83% of those who have ever smoked in Orange County admitted to smoking their first cigarette while under age 19; 30.73% smoked their first cigarette before age 14, and more than 2.6% smoked their first cigarette after age 26.
- ❖ One cigar can have the same amount of nicotine, tar, and carbon monoxide as 10 cigarettes.
- ❖ Regular cigar smokers have a 4 to 10 times greater risk of dying from certain types of cancer than nonsmokers. Among OCHNA survey respondents who smoked a cigar in the last month, 7.9% did so everyday.
- ❖ Scientific evidence now indicates nonsmokers can become seriously ill or die due to exposure to the toxins produced by other people's active smoking.
- ❖ Using smokeless tobacco was reported by less than 1% of OCHNA survey respondents.

TOBACCO

According to a 1997 Centers for Disease Control and Prevention (CDC) report, smoking is the number 1 preventable cause of premature death and disease in the United States, killing over 430,000 Americans annually – more than deaths due to alcohol, illegal drugs, homicide, suicide, car accidents, fire, and AIDS combined. Smoking causes 30% of heart disease and cancer deaths, and 80% of emphysema deaths. Nicotine, a major ingredient of tobacco, is highly addictive. Several studies have found nicotine to be as addictive as heroin, cocaine, or alcohol (Hemmingfield, et. al., 1990). Some 50 million Americans are now addicted to tobacco. A 1997 Food and Drug Administration report indicated that 1 in every 3 long-term users of tobacco will die from a disease related to their tobacco use.

OCHNA survey results indicated 17.7% of respondents smoke. The Orange County rate is lower than the rate for California (18.2%) and the United States (19.6%). The Orange County rate is currently higher than the Healthy People 2000 target of having no more than 15% of adults who smoke.

Adult Smoking Prevalence Rates Most Recent Data

Orange County	17.7%	*OCHNA Survey(1998)
California	18.2%	**BRFS-CATS (1997)
National	19.6%	***CPS (1996)
Year 2000 Goal	15%	****USDH.HS

* Orange County Health Need Assessment Survey, 1998 (OCHNA)

** California Behavioral Risk Factor Survey and California Adult Tobacco Survey 1997 (BRFS-CATS)

*** U.S. Bureau of the Census, Current Population Survey

**** U.S. Department of Health and Human Services "Healthy People Year 2000 Objectives"

Since 1990, the rate of decline in adult smoking prevalence has more than doubled in California representing a more rapid decrease than the national adult smoking prevalence rate. However, the adult smoking prevalence rate in California rose from 16.7% in 1995 to 18.2% in 1997. Orange County has followed California's trend, showing a significant decline in smoking rates from 1990 to 1996, and then seeing an increase in 1998 (OCHNA, 1998). Since 1990, Orange County has consistently shown a lower adult smoking prevalence rate than the state.

Trends in Adult Smoking Prevalence (%) Orange County, California, and United States 1990 to 1998

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Orange County	19.3%	-	-	18.1%	-	-	15.3%	-	17.7%
California	20.3%	-	20%	19.1%	17.3%	16.7%	18.6%	18.2%	-
U.S.	27.4%	25.7%	-	25%	25.5%	24.7%	-	-	-

Orange County – 1990: CTS; 1993, 1996: CATS and BRFS combined; 1998 OCHNA

Calif- 1990, 1992-3: CT S; 1994-97: CATS and BRFS combined

U.S.- 1990, 1991, 1993, 1994 and 1995: NHIS

Daily cigarette consumption for current smokers has declined both in California and the rest of the United States. In California, from 1992-1993 to 1995-1996, daily cigarette consumption declined by a factor of 10.4%. In the rest of the United States daily cigarette consumption declined by a factor of 4.4% (SDHS 1997 Pierce Report). Although the daily cigarette consumption has declined, California has not seen a similar decline in the number of people who smoke.

In Orange County, daily consumption of cigarettes has also declined steadily since 1990. The rate for smokers with a daily cigarette consumption of 0 to 4 increased from 21.9% in 1990 to 27.4% in 1998. The rate for smokers with a daily cigarette consumption of more than 25 decreased from 19.2% in 1990 to 10.9% in 1998 (OCHNA Survey). Survey results also indicated that respondents in the middle income category who smoke were significantly more likely to smoke every day, and respondents in the high income category were significantly less likely to smoke every day.

Daily Cigarette Consumption (cigarettes/day) for Current Smokers (%) Orange County

	0-4	5-14	15-24	25+
1990	21.9	24.1	34.7	19.2
1993	9.7	34.8	38.6	16.9
1996	24.9	27.9	33.8	13.3
1998	27.4	35.6	26.1	10.9

Calif SDHS BRFS-CATS 1990, 1993, 1996; OCHNA 1998

The fact that more than 90% of adult smokers began the habit in their teen years is well documented. (USDHS, 1989). Each day, 3,000 children start smoking; the average age at which they begin is 12 (USDHS, 1991). Between 1990 and 1993, teen smoking remained fairly constant. Since 1993, however, all measures of teen smoking behavior indicate that more adolescents are smoking and more will smoke in the future (CSDHS, 1998 Report).

In the 1998 OCHNA survey, 83.1% of smokers admitted to smoking their first cigarette while still in their teens (younger than age 19); 30.7% smoked their first cigarette before age 14, and 2.9% smoked their first cigarette after age 26.

When Respondents Smoked Their First Cigarette Orange County

Age	%	Cumulative %
4-14	8.3	8.3
15-19	57.7	66.0
20-25	26.2	92.2
26+	7.8	100.0

OCHNA Survey, 1998

Results from the 1998 OCHNA survey indicate a significant delay between the time smokers smoke their first cigarette and when they consider themselves “fairly regular” smokers. In the OCHNA survey, only 66% considered themselves “fairly regular” smokers by age 19; 8.3% considered themselves “fairly regular” smokers by age 14; and 34% did not consider themselves “fairly regular” smokers until after age 19.

Age Started Smoking Regularly
Orange County

Age	%	Cumulative %
9-14	8.3	8.3
15-19	57.7	66
20-25	26.2	92.2
26+	7.8	100.0

OCHNA Survey, 1998

The 1990 U.S. Surgeon General report noted smoking cessation is a primary prevention intervention. It is equally important as preventing smoking in order to protect the public health from the dangers of smoking-related diseases. Not only does cessation directly benefit the health of the former smoker; parents who quit reduce environmental tobacco smoke exposure to their children.

In 1996, approximately 50% of California smokers attempted to quit smoking (SDHS 1997 Pierce Report). In the 1998 OCHNA survey, 69.3% of Orange County smokers attempted to quit smoking, and more than 73.6% stated they would like to quit smoking. These statistics help illustrate the highly addictive nature of nicotine and how difficult it is to quit smoking. Orange County has surpassed the Healthy People Year 2000 goal of 50% of current smokers attempting to quit.

The health care professional-patient relationship provides a natural forum for smoking-cessation counseling. More than 70% of U.S. smokers see a health professional at least once a year; thus, health care professionals have access to more smokers than any other qualified individual, group, or institution in our society. Clinical trials have demonstrated that physicians and other health care providers can help their patients stop smoking.

In the 1998 OCHNA survey, 21.5% of respondents stated their health care provider discussed the topic of tobacco use with them within the past 3 years. In order for these data to be meaningful and comparable to the Healthy People 2000 goal, they must be cross-tabulated by smoker status. The Healthy People 2000 target for cessation counseling to smokers by primary care providers is 75%.

Recently, cigar smoking has become a trendy symbol of sophistication. California State Department of Health Services shows sales of premium cigars have increased from 78,000 cigars in 1977 to 275,000 cigars in 1996. Although many cigar smokers believe this behavior is less harmful than cigarette smoking, a single typical large cigar may have the same amount of nicotine, tar, and carbon monoxide as 10 cigarettes. According to a 1997 CDC report, regular cigar smokers have a 4 to 10 times greater risk of dying from cancer of the larynx, esophagus, or mouth as nonsmokers. Cigar smokers also face triple the rate of lung cancer compared to nonsmokers (Journal of NCI, 1985).

The State Department of Health Service California Tobacco Control survey collected data on cigar smokers in 1990, 1993, and 1996. The 1990 and 1996 surveys asked adult respondents who had ever smoked cigars whether they smoked them “every day,” “some days,” or “not at all.” For purposes of analysis, “every day” and “some days” were combined into the category of “current use.” In the adult population, “current use” increased significantly, from 2.5% in 1990 to 4.9% in 1996. However, the prevalence of “every day” use was only 0.2% in both years. It is of interest to note that among current users, the percentage smoking daily decreased from 9.0% in 1990 and 4.5% in 1996 (CSHDS, 1998 Pierce Report).

According to the 1998 OCHNA survey, 40.9% of Orange County adults have smoked a cigar; 16.1% have smoked 1 within the past month, 30.7% have smoked within the past 6 months, and 64% within the last 5 years. Among those respondents who had smoked a cigar within the past month, 7.9% smoked every day, 10.3% smoked several times a week, 9.6% smoked once a week, and 72.2% smoked less than once a week. Only .05% of Orange County adults smoke cigars on a daily basis. Results indicate that people in the high

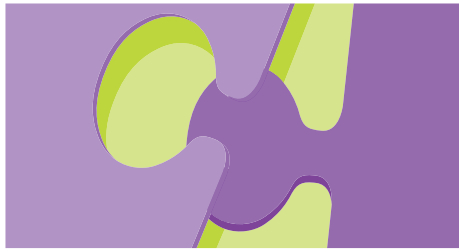
income category were significantly more likely to have smoked a cigar than those in the low or middle income categories.

Smokeless tobacco includes chewing tobacco and snuff. Such products contain tobacco leaves and a variety of additives. About 8,000 people die in the United States every year because of chewing tobacco: 70% from oral cancer. Other cancers caused by smokeless tobacco include cancer of the pancreas, nasal cavity, urinary tract, esophagus, pharynx, intestines, and stomach (Academy of General Dentistry, 1994). Smokeless tobacco contains higher levels of nicotine; it is therefore more addictive and users may have a more difficult time ceasing its use.

In the 1990 California Tobacco Control Survey, 2.1% of adult men in California used smokeless tobacco products; there was a slight increase to 2.5% in 1996. In the 1998 OCHNA survey, .6% of respondents stated they currently used chewing tobacco, 4.5% stated they currently used snuff, and .2% stated they used both. Respondents in the low income category were significantly more likely to use snuff than those in the middle or high income categories. Snuff and chewing tobacco were not broken out as separate smokeless tobacco products in the California Tobacco Control Survey so the two data sets are not comparable.

Environmental tobacco smoke (ETS), or second-hand smoke, is smoke from the burning end of a cigarette, cigar or pipe, and exhaled smoke. ETS is no longer considered just an unpleasant side effect of cigarette smoking. Scientific evidence now indicates nonsmokers can become seriously ill or die due to exposure to the toxins produced by other people's active smoking. A 1992 U.S. Environmental Protection Agency report classified ETS as an agent known to cause cancer in humans. A 1997 California Environmental Protection Agency report stated each year ETS causes 1,200-2,200 cases of low birth weight, 120 sudden infant deaths, 960 to 3,120 new cases of asthma in children, 360 lung cancer deaths, and 4,200 to 7,400 deaths due to ischemic heart disease in California.

Data taken from the 1993 and 1996 California Tobacco Control Survey demonstrated a slight increase in the percentage of homes with "smoke-free policies" for both the state and Orange County. The number of state households banning smoking increased from 50.9% to 63.7%. Similarly, the number of Orange County households banning smoking increased from 57.2% to 68.9%. The 1998 OCHNA survey did not ask respondents about their household smoking policies but whether "anyone smoked in the household on a regular basis." More than 86.6% of households surveyed did not have anyone who smoked regularly in the home, and 13.4% of households surveyed did. Because the OCHNA survey question was asked differently than the California Tobacco Control Survey, a comparison cannot be made between the two data sets.



Community Health: Working the Puzzle

SEXUAL BEHAVIOR SUMMARY

- ❖ According to the Orange County Department of Education, all schools in the county provide at least 1 semester of health and sex education including HIV and STD information.
- ❖ More than 86% of OCHNA survey respondents indicated sex education should be provided at home and 57% indicated it should be provided in schools.
- ❖ In 1997, persons aged 15 to 24 accounted for the highest proportion (64%) of chlamydia cases in Orange County. Additionally, persons in their 20s represented one quarter of all of Orange County AIDS cases.
- ❖ The 3-year average annual teen birth rate between 1994 and 1996 for Orange County was 59.3 per 1,000 female adolescents aged 15 to 19.
- ❖ Proper and consistent use of latex condoms, when engaging in sexual intercourse, can greatly reduce the risk of acquiring or transmitting STD including HIV.
- ❖ Reports of STDs in Orange County have declined over the past 10 years. Chlamydia and nongonococcal urethritis now represent the most frequently reported STDs.
- ❖ The number of new AIDS cases declined 34% from 1996 to 1997.

SEXUAL BEHAVIOR

According to a 1997 Institute of Medicine report, sexually transmitted diseases (STD) are the most commonly reported diseases in the United States, and affect all population groups. More than 12 million Americans are infected with STD each year. Adolescents and young adults are at greatest risk of acquiring STD. Each year, approximately 3 million teenagers acquire an STD and many will develop long-term complications as a result. The Institute of Medicine states women and children suffer a disproportionate amount of the STD burden, with pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer associated with human papillomavirus, fetal and infant deaths, and congenital defects among the most serious complications.

Healthy People 2000 has a target of 95% of schools that have appropriate HIV and other STD education curricula for students in 4th through 12th grades. *Healthy People 2000* emphasizes teaching sexual disease prevention and transmission that is based on scientific information. According to the Department of Education, all Orange County schools provide at least 1 semester of health and sex education including HIV and STD information to their students. However, there are no consistent standards or assessment measurements applied to this curriculum to ensure its effectiveness.

More than 86% of OCHNA survey respondents indicated sex education should be provided at home; 57%, in schools; and 9.6%, hospitals. The table below illustrates where sex and health education should be taught according to OCHNA participants.

	Health Education		Sex Education	
	Yes (%)	No (%)	Yes (%)	No (%)
Home	78.7	21.3	86.2	13.8
School	61.9	38.1	57.0	43.0
Hospital location	18.7	81.3	9.6	90.4
Church, synagogue, or temple	13.4	86.6	9.7	90.3
Other	2.4	97.6	1.3	98.7

Healthy People 2000 has a goal of reducing the proportion of adolescents who have engaged in sexual intercourse to no more than 15% by age 15, and no more than 40% by age 17. In the 1995 National Survey of Family Growth conducted by the Department of Health and Human Services National Center for Health Statistics, 50% of females aged 15 to 19 surveyed reported “having ever had intercourse.” This finding was a 5% decrease from the previous survey in 1990, and was the first decline ever recorded by this same periodic survey. Earlier studies reflected a steady increase of females aged 15 to 19 indicating “having ever had sex;” 53% in 1988, 47% in 1982, 36% in 1975, and 29% in 1970.

DHHS National Institute of Child Health and Human Development research conducted by the Urban Institute demonstrated a similar trend for teenaged males. The percentage of never married teenaged males aged 15 to 19 who “have ever had sexual intercourse” declined from 60% in 1988 to 55% in 1995 reversing a trend measured since 1979.

OCHNA survey participants were asked if they would encourage their teenagers to use a condom if they were sexually active. The table below compares answers from 3 survey groups: the 1998 OCHNA survey, the 1996 California Behavioral Risk Factor Surveillance Survey (BRFSS), and the 1996 U.S. BRFSS. OCHNA survey results indicated participants were less likely than state or national respondents to encourage their sexually active teenagers to use condoms. OCHNA participants were more likely than their state or national counterparts to offer other advice to their sexually active teenagers. Such parents may advise their teenagers to abstain from sexual activity.

	Yes (%)	No (%)	Would give other advice (%)
OCHNA (1998)	87.1	3.0	9.9
California BRFSS (1996)	91.8 (90.4-93.1)	2.2 (1.5-2.9)	6.0 (4.9-7.2)
US BRFSS (1996)	89.5	1.7	9.0

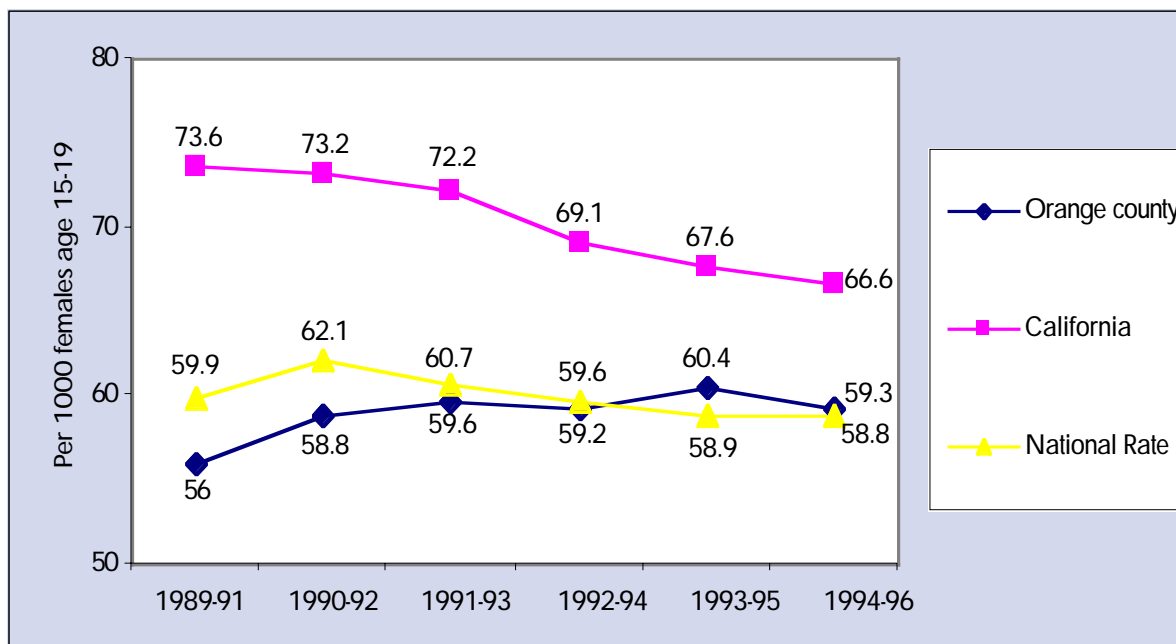
The risk of contracting sexually transmitted diseases and pregnancy are two important related issues confronting sexually active adolescents today.

According to a 1997 study done by the Orange County HCA, persons aged 15 to 24 accounted for the highest proportion (64%) of chlamydia cases in Orange County. *Healthy People 2000* aims to reduce the prevalence of chlamydia infections among young women under age 25 to no more than 5%. Additionally, people in their 20s represent 25% of AIDS cases in Orange County; many of them may have been infected with HIV in as teenagers.

Orange County HCA reports showed the 3-year average annual teenage birth rate between 1994 and 1996 was 59.3 per 1000 female adolescents aged 15 to 19. The Orange County rate was slightly higher than the national rate of 58.8 births per 1000 females but lower than the 66.6 adolescent birth rate for California.

A 1996 CDC study showed the proper and consistent use of latex condoms when engaging in sexual intercourse can greatly reduce a person's risk of acquiring or transmitting STD including HIV infection. Similarly, according to a 1994 report in *The New England Journal of Medicine*, recent studies provided compelling evidence that latex condoms were highly effective in protecting against HIV infection when used properly for every act of sexual intercourse.

Births to Adolescents, 1991 to 1996

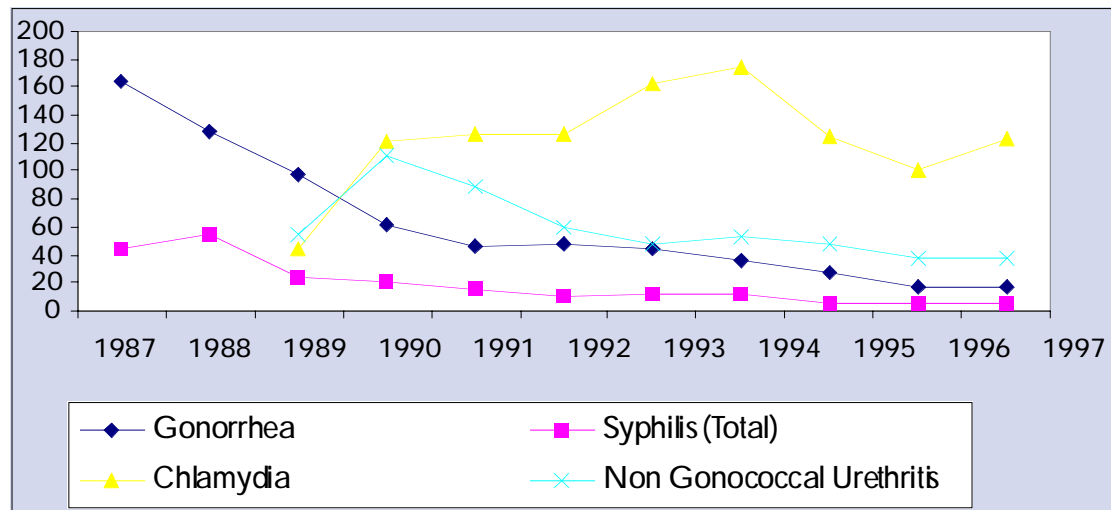


More than 18% of OCHNA survey respondents indicated they used condoms for protection against STD; 55% said they used condoms “always.” Survey participants represented adults in a variety of relationships and circumstances. Although 18% may appear to be a small percentage, a valid conclusion cannot be drawn regarding the other 82% who did not use condoms for protection against STD. Some respondents may not be at risk for STD such as people who are not sexually active and individuals who are in committed monogamous relationships. Others may not be aware of their risk for STD or they may be using condoms for contraceptive purposes only.

In 1998 the Orange County Consumer HIV Prevention Survey was administered to a number of subgroups to assess their risk of HIV transmission. The subgroups included gays, bisexuals and heterosexuals, males, females; transgender individuals; persons with AIDS and uninfected individuals; homeless and incarcerated persons; drug users; disabled persons; and others. Of the 109 responses, 45% responded “yes” and 55%, “no” when asked if a condom had been used during the last anal sex act. When asked if a condom had been used during the last vaginal sex act, 32% said “yes” and 68% said “no.” A total of 88 participants reported “no vaginal sex in the last 6 months.”

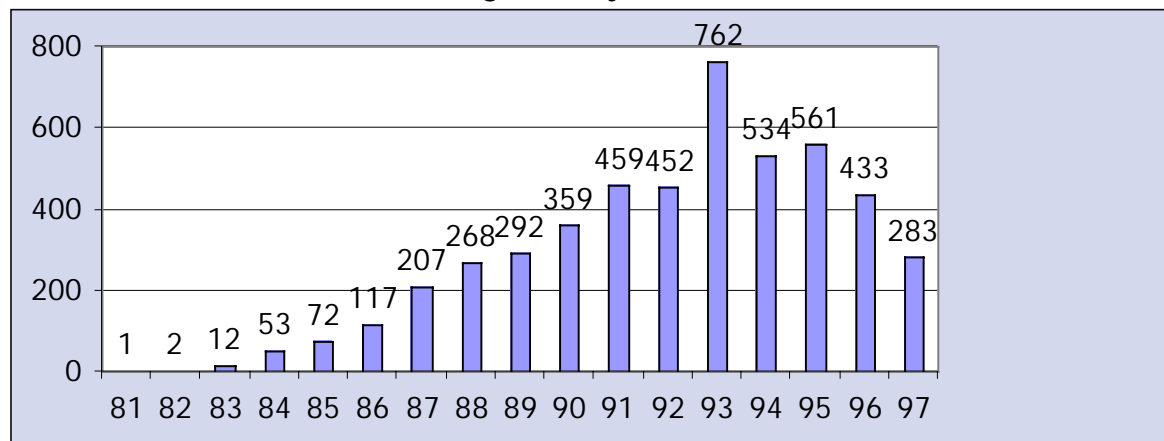
Overall, reports of sexually transmitted diseases in Orange County have declined over the past 10 years. The graph below shows trends in case rates per 100,000 population of the major reportable sexually transmitted diseases for the last 10 years. Gonorrhea and syphilis rates have dropped dramatically in this period. Chlamydia and nongonococcal urethritis, which became reportable in 1989, now represent the most frequently reported STD.

**Orange County Sexually Transmitted Diseases
Case Rates, 1987 to 1997**



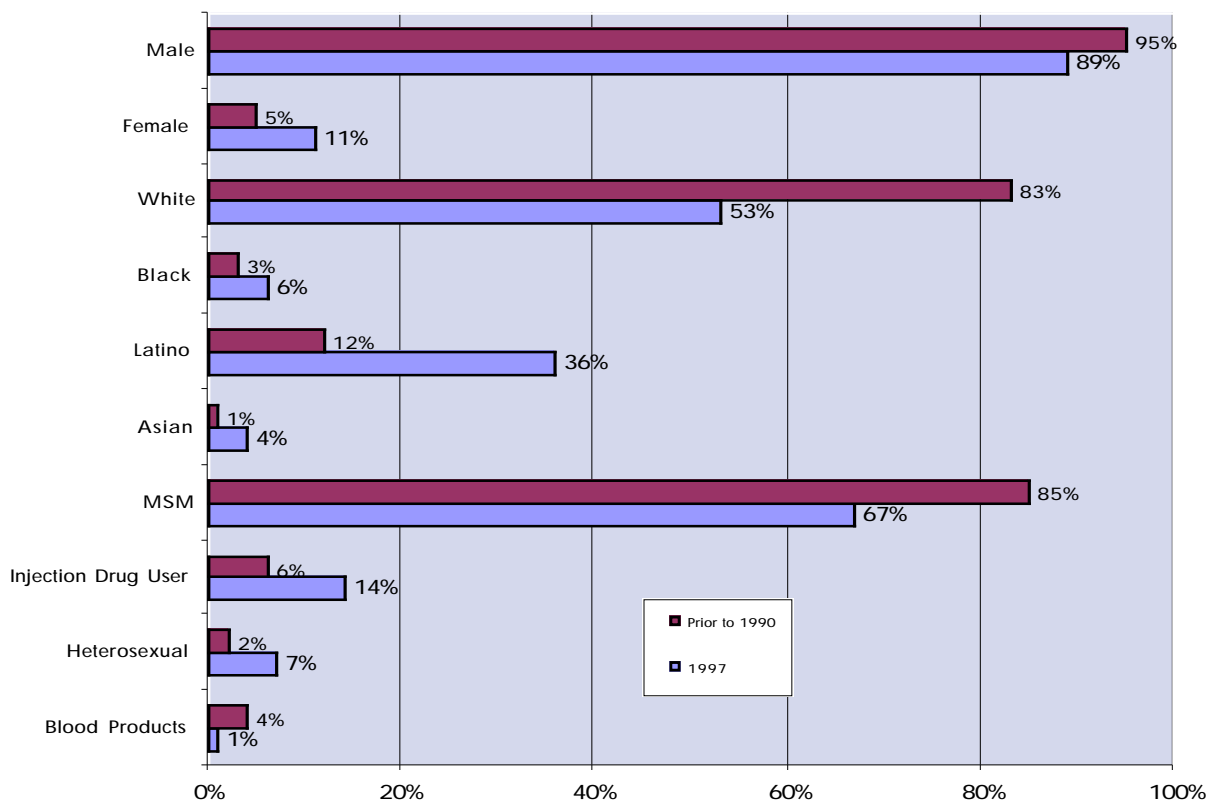
In Orange County from 1981 to 1997, a total of 4,867 AIDS cases were reported to the CDC. A large increase in reported cases occurred in 1993 (69% higher than 1992) because of the expansion of the AIDS surveillance case definition that same year. The number of reported AIDS cases declined 34% from 1996 to 1997. The 283 AIDS cases reported in 1997 represented the lowest annual total since 1988.

AIDS Cases by Year of Report Orange County, California



In Orange County, most reported AIDS cases were among men who have sex with men (msm). However, this proportion declined from 85% in 1990 to 67% in 1997. Injection drug use (IDU) cases saw an increase from 6% in 1990 to 14% in 1997. Heterosexual transmission also increased from 2% in 1990 to 7% in 1997. Of the 21 heterosexual cases identified in 1997, 81% (17) could not identify the risk factor of their HIV positive partner, 10% (2) identified an IDU HIV positive partner, 5% (1) identified a bisexual HIV positive partner, and 5% (1) identified a hemophiliac HIV positive partner.

AIDS Cases by year of Report 1997 Cases vs. Cases Reported Before 1990



Healthy People 2000 has a goal of increasing to at least 50% the proportion of sexually active, unmarried people who used a condom at last sexual intercourse. However, for complete protection from sexually transmitted diseases, abstinence and sexual intercourse between mutually monogamous uninfected partners are the only totally effective measures. Consequently, public health measures to slow the spread of sexually transmitted diseases needs to include education about and promotion and provision of effective protection.

SUN PROTECTION SUMMARY

- ❖ Suntan is a sign of skin damage and is the skin's attempt to protect itself from the sun by generating additional coloring (pigment).
- ❖ Sun damage can lead to serious problems such as sunburn, premature wrinkling, and skin cancer.
- ❖ Current studies indicate the risk of developing melanoma (the most serious form of skin cancer) has increased significantly to 1 in 87.
- ❖ 20% of Americans will develop some form of skin cancer in their lifetime.
- ❖ OCHNA survey respondents indicated more than 15% “always” wear protective clothing and more than 30% “never” do.
- ❖ The majority of sun exposure occurs before age 20. Consequently, protecting children from the sun is critical.

SUN PROTECTION

It is easy to forget that any suntan is a sign of skin damage when living in sun-worshipping southern California. The American Academy of Dermatology notes a suntan is the skin's attempt to protect itself from the sun by generating additional coloring (pigment). Sun damage can lead to serious problems such as sunburn, premature wrinkling, and skin cancer.

According to Darrell Rigel, M.D., the risk of developing skin cancer has increased drastically over the past 60 years. Between 1930 and 1980, the chance of getting melanoma (the most serious form of skin cancer) increased from 1 in 1,500 to 1 in 250. Current studies indicate this number has increased significantly to 1 in 87.

Because the risk of developing skin cancer is high (20% of Americans will develop some form of skin cancer during their life), it is important for people to take necessary precautions to protect themselves. Participants in the OCHNA survey were questioned about how often they wore protective clothing such as tightly woven loose fitting clothes, hats, and sunglasses when going in the sun. More than 15% of respondents stated they “always” wear protective clothing; more than 30% “never” do.

How often do you wear protective clothing in the sun?	Responses (%)
Never	32.7
Sometimes	24.2
Always	15.1
Seldom	14.5
Almost always	13.5

According to the American Academy of Dermatology, studies indicate the majority of sun exposure occurs before age 20. Consequently, protecting children from the sun is critical.

Tips for avoiding sun damage:

- ❖ Stay out of the sun between 10 a.m. and 3 p.m. when the sun's rays are strongest.
- ❖ Wear protective clothing and sunscreen when out in the sun.
- ❖ Use sunscreen with a SPF (skin protection factor) of 15 or higher.
- ❖ Infants younger than 6 months old should not be in the sun.
- ❖ Sun damage can still occur on cloudy and overcast days.
- ❖ Heat and wind can increase the harmful effects of the sun.